

## ABSTRACT OF THE DISCLOSURE

The present invention relates to processes for fabricating polymeric hollow fibers. Specifically, a removable solid core fiber is provided for coating one or more layers of a polymeric membrane-forming material thereon. After treating the polymeric membrane-forming material layer to form a solidified polymeric membrane having a permanent tubular shape, the solid core fiber is selectively removed, leaving an elongated lumen inside the solidified polymeric membrane, which forms a high quality polymeric hollow fiber that is substantially free of deformation defects. The solid core fiber can be made of a removable substrate material, such as water-soluble polymers polyvinyl pyrrolidone (PVP), polyvinyl alcohol (PVA), or polyethylene glycol (PEG), which are subsequently and selectively removable by water. Alternatively, the solid core fiber can be coated with a removable substrate material, which imparts removability to such solid core fiber.